

CLAIMS

What is claimed is:

1. A method for assigning resources in wireless communication systems, the method comprising the steps of:

measuring path loss between a wireless transmit/receive unit (WTRU) and a plurality of base stations;

identifying candidate base stations based on the path loss measurements;

estimating an increase in noise rise in the uplink and downlink;

estimating an increase in required transmission power in the uplink and downlink;

selecting the uplink and downlink timeslots having the least amount of increase in noise rise.

2. The method of claim 1 wherein the selected uplink and downlink timeslots are in a cell that does not have the minimum amount of path loss with respect to the WTRU.

3. The method of claim 1 wherein the selected uplink and downlink timeslots have the least amount of noise rise in terms of absolute value.

4. The method of claim 1 wherein the selected uplink and downlink timeslots have the least amount of increase in noise rise and required transmission power.

5. The method of claim 4 wherein the selected uplink and downlink timeslots have the least amount of noise rise and required transmission power in terms of absolute values thereof.

6. The method of claim 1 wherein the candidate base stations are base stations having a path loss less than a predetermined amount with respect to the WTRU.

7. The method of claim 6 wherein the predetermined amount is 3 dB.

8. A wireless communication system wherein a plurality of cells may be evaluated for assigning system resources, the wireless communication system comprising:

at least one radio network controller;

a plurality of cells wherein at least one base station is associated with said cells;

a plurality of WTRUs each having a processor configured to measure path loss between itself and a particular base station; and

wherein the plurality of WTRUs further include a processor configured to estimate an increase in noise rise and required transmission power and request resources in a timeslot of at least one of a plurality of cells having a path loss below a predetermined value with respect to the WTRU requesting the resources.

9. The wireless system of claim 8 wherein the timeslot and cell combination from which resources are requested is the timeslot and cell combination having the least amount of increase in noise rise and the least amount of increase in required transmission power.

10. The wireless system of claim 9 wherein the cell of the selected timeslot and cell combination is not the cell with the minimum amount of path loss with respect to the WTRU requesting system resources.

11. The wireless system of claim 8 wherein the predetermined value is 3 dB.